High Country News
FOR PEOPLE WHO CARE ABOUT THE WEST

Silverton's Gold King reckoning

How the Animas River disaster forced Silverton to face its pollution problem — and its destiny.

Jonathan Thompson May 2, 2016

"Instead of a pure, sparkling stream of water, an opiate for tired mind and jaded nerves, what do you see? A murky, gray stream of filthy, slimy, polluted water, a cesspool for the waste of man."

—Durango-area farmer, 1937

On the morning of Aug. 5, 2015, a deep pool of acidic, metal-laden water was backed up behind debris in the Level 7 adit of the Gold King Mine on the slope of Bonita Peak, roughly 10 miles north of Silverton, Colorado. The pool had been rising for years, imprisoned in the dark of the mine, yearning, as all water does, to be free.

Outside, on the other side of the wall, a CAT excavator scooped jerkily at the debris and the slope. A few contractors and Environmental Protection Agency employees stood in the hard light of the high-altitude sun, watching.

For most of the summer, the crew had been working down the hill on the Red & Bonita Mine, putting in a concrete bulkhead to control the drainage of toxic water from its tunnels. In late July, workers moved on to the more challenging collapsed portal of the Gold King, which in recent years had become one of Colorado's most polluting mines. Uncertain how to proceed, the EPA's on-scene coordinator, Steve Way, postponed the job, pending a Bureau of Reclamation site inspection.

While Way was on vacation, however, his replacement, Hayes Griswold, a thick-necked, gray-haired man in his 60s, ordered work to proceed. He knew the risks. In May, the contractor on the job had noted, in the action plan, "Conditions may exist that could result in a blow-out of the blockages and cause a release of large volumes of contaminated mine waters and sediment." In situations such as this, the typical first step would be to drill in from above to assess the mine pool's depth and the pressure it exerted on the dirt and rock. Instead, apparently unsure about where the actual mine portal was, the crew burrowed into the debris.

Around 10:30 a.m., a thin stream of water spurted out, steadily growing into a fountain, then a roiling torrent of thick, Tang-colored water. As the workers looked on, stunned, the water roared over the edge of the mine waste-rock dump, carrying tons of the metal-laden material with it, crashing into the gently gurgling stream of the North Fork of Cement Creek, far below.

"Should we get out of here?" one worried worker asked.

"Oh, he's going to be pissed," another answered. "This isn't good."

"What do we do now?" someone else asked, shocked yet oddly calm, as though a household plumbing project had gone awry.

The workers avoided the deluge, but one of their vehicles, left below the jobsite, was submerged in orange slime. Farther downstream, along Cement Creek, the 3 million-gallon "slug" of water and sludge, laden with high concentrations of iron, zinc, cadmium and arsenic, roared past the old town site of Gladstone and another six miles to Silverton, where it cannoned into the waters of the Animas River.

It took about 24 hours for the prow of the slug to navigate the narrow, steep gorge below Silverton and reach the Animas River Valley, seven miles upstream from Durango, where I live.

I spent most of my childhood summers in, on or near the Animas, and often watched the river turn sickly colors: Yellowish-gray after the 1975 tailings pond failure; almost black when Lake Emma burst through the Sunnyside Mine three years later. Back during the 1950s, a uranium mill in Durango dumped 15 tons of radioactive goop into the river daily. Surely, I thought, as news of the catastrophe hit social media, this couldn't be any worse than that.

Curious, I raced out to examine the river, at a place where the valley, scoured flat by glaciers some 10,000 years ago, slows the Animas to a placid flow. Turbid, electric-orange water, utterly opaque, sprawled out between the sandy banks, as iron hydroxide particles thickened within the current, like psychedelic smoke. Downstream, the Animas was empty, not a sign of Durango's ubiquitous boaters, swimmers and partiers. For 100 miles along the river, irrigation intakes were shut. After nightfall, the plume slipped through town like a prowler and continued toward the San Juan River and New Mexico and Utah.

Kayakers on the Animas River north of Durango, Colorado, a day after work being done by the Environmental Protection Agency and contractors at the Gold King Mine unleashed a 3-million-gallon "slug" of water and sludge laden with high concentrations of iron, zinc, cadmium and arsenic. The kayakers told Durango Herald photographer Jerry McBride that they hadn't heard about the mine spill, and later told the paper that since it's not uncommon for the river to run brown during high run-off, they didn't think anything of it, despite the color looking a little more "in depth" than usual.
Jerry McBride/The Durango Herald/Polaris

In the weeks and months that followed, there was plenty of pain to go around. Durango rafting companies lost hundreds of thousands of dollars' worth of potential business. In the small fields of the Navajo Nation, along the San Juan River, corn shriveled without water. For many Navajo, the water is spiritually significant, and seeing it marred was heartbreaking, a bitter reminder of the many times they had borne the brunt of upstream pollution.

Most of the vitriol was directed at the EPA and its careless actions on Aug. 5. But others blamed a federal mining law that hasn't been updated in 150 years. In Durango, though, most of the ire was directed at its upstream neighbor, Silverton, which had long resisted federal efforts to use the Superfund to clean up the hundreds of now-abandoned mines that gave birth to the town and sustained it for decades.

Like a cathartic purge, the Gold King disaster swept most of that resistance away.

In February, the town of Silverton and the San Juan County commissioners voted unanimously to request Superfund designation, carefully calling the site the "Bonita Peak Mining District," to divert attention from Silverton and mitigate impacts to its tourist industry. In Durango, and even, to my surprise, in Silverton, there was a palpable sense of relief, a feeling that the whole region might finally move beyond its messy past, clean up the river for good and embrace the future.

But I had my doubts. Having watched the decades-long collaborative effort to clean up the watershed, I knew that the problem was too complex, the wounds too deep and stubborn to easily heal. And I knew that "The Mining Town That Wouldn't Quit" was too deeply attached to its extractive past to easily refashion a shiny new identity from the rubble of the industry's demise.

So I went upstream to dig up the real story behind the Gold King Mine disaster, a tale of a community, of mining and of water, and the inextricable way they are entwined.

Wastewater continues to stream out of the Gold King Mine near Silverton, Colorado, Aug. 28, 2015, weeks after the initial breach caused by an Environmental Protection Agency cleanup crew.
Geoff Liesik/Deseret News

Acid mine drainage may be the perfect pollutant. It kills fish, it kills bugs, and it lasts forever. And you don't need a factory, lab or fancy chemicals to create it. All you have to do is dig a hole in the ground.

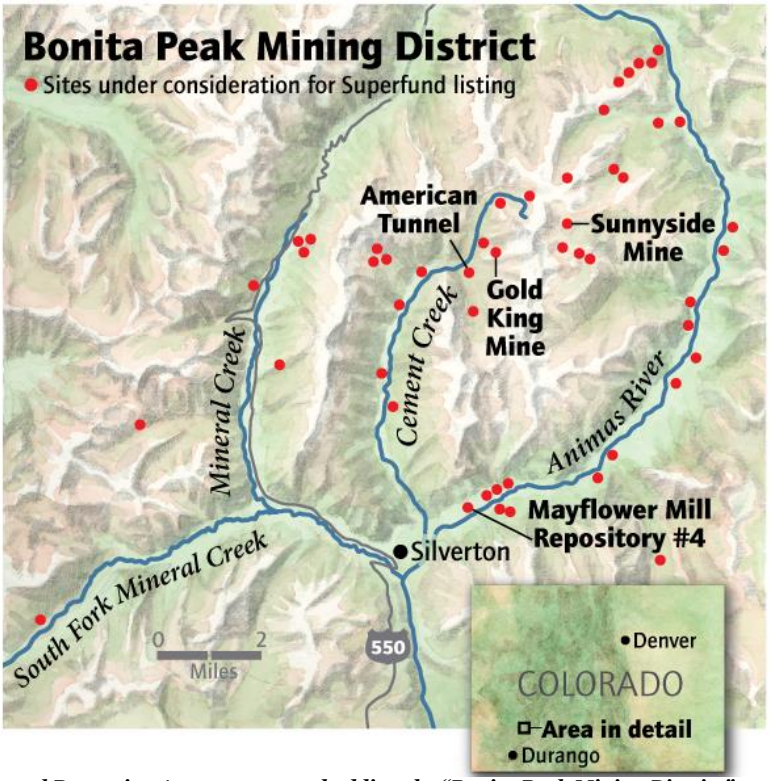
The hole — assuming it's in a mineralized area — will expose iron sulfide, aka pyrite, to groundwater and oxygen. And when these collide, a series of atom-swapping reactions ensues. Oxygen "rusts" the iron in the pyrite, yielding orange iron oxides. And hydrogen, sulfur and oxygen atoms bond to create sulfuric acid, which dissolves zinc, cadmium, lead, copper, aluminum, arsenic and other metals. Naturally occurring, acid-loving microbes then feast on the metals, vastly accelerating the whole process. The acids in this bisque can devour iron pipes, and the toxic metals render streams uninhabitable, sickening fish for miles downstream. Once the process is catalyzed, it's almost impossible to stop. A Copper Age mine in southern Spain, abandoned four millennia ago, pollutes the aptly named Rio Tinto to this day.

Mining not only indelibly alters a watershed's hydrology and chemistry, it also forever shapes the identity of the communities around it.

Miners first started drilling, blasting and digging holes into the mountainsides of the Silverton Caldera, a 27-million-year-old collapsed magma chamber, in 1872. The San Juan Mountains were still officially the

domain of the Utes, who for centuries had followed the game into the high country every summer. Silverton was founded in 1874, and that same summer the Hayden Survey came through, marveling at the complicated mass of mountains, among the last piece of the Lower 48 to be invaded, or even visited, by European-Americans. What they found was a wilderness we can only imagine today. One of the surveyors, Franklin Rhoda, wrote about how, on Uncompahgre Peak, "at an elevation of over 13,000 feet, a she grizzly, with her two cubs, came rushing past us," and about huge herds of mountain sheep stampeding across rolling, wildflower-spattered highlands.

Less than a decade later, the railroad reached the caldera, opening the doors to humanity and its detritus. Giant mills crowded the valley floors, tramlines hung across meadows. The mountains' innards were honeycombed with hundreds of miles of mine workings, which served as vast, subterranean acid mine drainage cauldrons. Steep slopes were stripped of their trees, the waters ran gray with mill tailings. The wild lands that Rhoda had marveled at were now industrialized, the grizzly on the run, the Utes pushed onto a sliver of land to the south.



On April 7, the Environmental Protection Agency proposed adding the "Bonita Peak Mining District" to the National Priorities List, making it eligible for Superfund. Forty-eight mine portals and tailings piles are "under consideration" to be included. The Gold King Mine will almost certainly be on the final list, as will the nearby American Tunnel. The Mayflower Mill #4 tailings repository, just outside Silverton, is another likely candidate, given that it appears to be leaching large quantities of metals into the Animas River. What Superfund will entail for the area beyond that, and when the actual cleanup will begin, remains unclear. *- Eric Baker*

Despite Silverton's wind-bitten perch at 9,318 feet, its isolation, inhospitable climate and lack of coal for fuel or arable land, the town blossomed. Homes sprouted across the floor of Baker's Park, from Quality Hill to Poverty Flats. In the early 1880s, Greene Street, the main drag, was lined with businesses, from the Saddle Rock Restaurant and Stockman Barber Shop to the Wong Ling Laundry and Lewke Shoe Shop. Nearly every other hastily constructed facade was a saloon: Tivoli, Olympic, Occidental, Cohen and, surely the rowdiest, the Diamond, run by the notorious Bronco Lou, a "wily she-devil" and "enticing seductress," who, it was rumored, killed as many as five lovers and husbands.

Silverton's adolescent rowdiness ultimately mellowed (Bronco Lou was even run out of town), and the prosperity snowballed. At its 1907 peak, the mining industry employed more than 2,000 men — half the local population. The mélange of ethnicities fostered a rich culture, and the relatively stable flow of cash supported several newspapers, a healthy school, and strong government institutions, as well as a powerful miners' union.

Ugliness could arise from the amalgamation, too. In 1906, a union-led mob drove the entire Chinese-American population from town. And after a protracted, bitter strike, a company-led mob drove the labor organizers from the caldera, killing the union for good. Still, the residents enjoyed an economic equality that seems these days to have gone extinct.

"It was a blue-collar town, but an upper-class blue-collar town," remembers Bev Rich, a Silverton native, now in her mid-60s and chairman of the San Juan County Historical Society, easily the town's most influential nonprofit. "It was a great place to grow up, because everyone's dad worked in the mine and everyone was equal. The community was racially diverse, and it was safe."

Silverton lorded over its neighbors, sitting not only at the headwaters of the area's rivers, but also the regional economy. When Durango threatened to sue Silverton-area mills for dumping tailings directly into the river, tainting drinking and irrigation water, Silverton shrugged it off, the editor of the local newspaper suggesting that Durango think twice before "killing the goose that laid the golden egg." Durango capitulated, shifting its primary water source in 1902 from the river that runs right through town to a safer source, the Florida River, several miles away. The system is still in place.

Yet it all hinged on one industry, mining, prone even then to the ups and downs of the national and global market. In 1924, the once wildly profitable Gold King, beleaguered by a string of disasters and bad management, went dark. The county's biggest mine, the Sunnyside, shut down in the late 1930s, partly because of the cost of hauling ore and pumping water uphill to get it out of the mine. And in 1953, the only major operator remaining, the Shenandoah-Dives, also went quiet.

With the industry virtually dormant, Silverton struggled through what became known as the "Black Decade."

The town clung to life, however, thanks in part to the silver screen's mythical Wild West and a steam locomotive that had long hauled ore from Silverton to Durango's smelter. The train itself became a movie star, along with Clark Gable and Barbara Stanwyck, and it began to haul tourists into Silverton, where they were greeted by a surrealistic spectacle — part Western movie-set, part Third World medina — that included elaborate fake gunfights. Loudspeakers blared advertisements and merchants swarmed passengers, begging them to buy hamburgers or tchotchkes.

Tourism kept the town afloat, but it was no replacement for mining. The pay was lousy, the season short, and it banked on what Bev Rich calls a false "rinky-dink, rubber tomahawk" version of history. "You develop a foul taste in your mouth when one of the gunfight participants says, as she walks away from the pile of bodies, 'Everyone come to the Bent Elbow, the best food in town,' " noted a *Silverton Standard* editorial in 1963, summing up the sentiment of many locals.

So when Standard Metals announced in 1959 that it would re-open the Sunnyside Mine, the people of Silverton rejoiced. The plan was to extend the existing American Tunnel — started in the early 1900s but never finished — from the old town site of Gladstone two miles underground to the Sunnyside, where ore still lingered in the rock. It worked, leading a revival of mining that lasted for three decades.

Tourism continued to grow, though the locals accepted it grudgingly. "Prosperity stemming from mining is welcome," Ian Thompson, my father, wrote in 1964 in the *Standard.* "Prosperity stemming from tourists is inevitable." Miners, working underground, looked out for one another. Tourism, on the other hand, was a crassly commercial, dog-eat-dog world. Silverton was torn apart by these conflicting identities in a long-running, Dr. Jekyll-Mr. Hyde struggle.

"The Train is the instrument of death," George Sibley, a longtime western Colorado writer, wrote in the *Mountain Gazette* in 1975, referring not to the railroad itself but to the new economy it ushered in. "Among the miners, still the core of what remains of the Silverton community, there is an attitude ranging from bare tolerance to outright disgust toward The Train."

Inevitably, though, global economics would triumph over local sentiment. Gold prices slumped, and massive open-pit mines in Chile and Nevada brought competition. By the mid-1980s, mining company bankruptcies were weekly headline fodder. Finally, in 1991, the Sunnyside shut down for good. One hundred and fifty miners lost their jobs, and Silverton lost its center. All that remained was a rich historic legacy — and the toxic water still draining from the mines.

Not long after the Gold King blowout, I sat down with Bill Simon at his earthen home north of Durango. Simon is an ecologist who has long worked to improve the environmental health of the Silverton Caldera. I first met him in 1996, when I was a cub reporter for the *Silverton Standard & the Miner*. Back then, Simon was leading the local effort to understand and tackle mine pollution, traipsing around the caldera, sampling streams and piloting a backhoe on remediation projects. Now, his old mop of brown hair is a roughly shorn gray, and he moves slowly and awkwardly. Simon has Parkinson's, but its physical ravages have not affected his intellect. We talked for more than three hours, and it struck me that he carries a multidimensional map of the upper Animas watershed in his head, its geology, hydrology and history — even its politics. He's as intent as ever on solving the caldera's mysteries.

Simon was quick to remind me that Silverton's pollution problem is relatively small on a global scale, paling in comparison to, say, the Bingham Canyon Mine outside Salt Lake City, which has created a 70-square-mile underground plume of contaminated groundwater, or California's Iron Mountain Mine, the waters of which are some of the most acidic ever sampled outside the lab. More rock is scooped from a large-scale modern mine in a day than the Sunnyside Mine produced in a lifetime.

"So the problem of acid mine drainage is huge. It's worldwide," says Simon. "That's why I got involved. The problem is being ignored."

Simon's involvement began incrementally back in 1970, when he first came to Silverton. Originally from Colorado's Front Range, he attended the University of California, Berkeley, in the 1960s, where he helped found the Environmental Studies College and worked toward a doctorate in evolutionary ecology. After the military began taking "too much interest" in his work, though, he fled, landing in southwestern Colorado's high country.

Bill Simon was co-coordinator of the Animas River Stakeholders Group when he was photographed in 2013 collecting soil samples at the San Antonio Mine near Red Mountain Pass. The Congress Mine can be seen in the distance.
Jerry McBride/Durango Herald

He worked for various mining companies, doing excavation or surface work and then big welding jobs, sometimes cleaning up a site or planting trees afterward. By then, the Colorado Department of Public Health and Environment and the state Division of Wildlife (now Colorado Parks and Wildlife) had pronounced most of the Silverton Caldera's waters "dead," thanks to natural mineralization, acid mine drainage and tailings spills. That's why the wildlife agency had stopped stocking them with trout, a common practice in the state for decades. But Simon had noticed areas that he thought seemed fish-worthy.

So, when he became a San Juan County commissioner in 1984, Simon decided to test his theory, using fish as his guinea pigs and the watershed's streams, beaver ponds and lakes as his laboratory. With a group of miners, who were also anglers, he hiked to backcountry waters carrying packs that held thousands of fingerling trout, donated by the state Division of Wildlife.

Even Simon was surprised by how many of those trout survived, including fish in seemingly sullied stretches of water. That meant that other stream segments might be able to support fish, too, if they were cleaned up. This realization ushered in Silverton's next challenge — one that was less about the town's economy or its historic past and more about ecology and the future.

Charged with enforcing the 1972 Clean Water Act, "the state health department took note," Simon says, and began the process of setting water-quality standards for local streams. That made locals, Simon included, nervous. The state appeared to be working with incomplete data that did not account for natural sources of metal loading. That could result in unrealistic water standards, or even lead to the Silverton Caldera being designated under the Comprehensive Environmental Response, Compensation and Liability Act, better known as Superfund.

The last thing most people wanted was to be declared the nation's next Love Canal. Locals dreaded an invasion of federal bureaucrats who would end any possibility of hardrock mining's return, because once a mine has been listed, no company will touch it. As an alternative, the state agreed to help the community form a consensus-driven organization called the Animas River Stakeholders Group, hiring Simon as its coordinator. "We figured we could empower the people to do the job without top-down management," Simon explained, "and develop stewardship for the resource, which is particularly useful in this day and age."

Steve Fearn, former owner of the Gold King Mine, believes mining still has a place in Silverton.
Jeremy Wade Shockley

Members spanned the spectrum from environmentalists to miners. Some of them — such as Steve Fearn and Todd Hennis, past and present owners of the Gold King Mine — hoped to mine here in the future.

Fearn, in particular, believed that active mining could actually result in cleaner water in a place like Silverton, which was already pocked with abandoned, draining portals. Any new mining is likely to occur in existing mines (more destructive open-pit mining is not considered feasible here) where drainage is already a problem. Re-opening such a mine would require a discharge permit, as mandated by the Clean Water Act, and a plan for treating the drainage, bringing in a responsible party — a company — where none currently existed.

Working with a team of U.S. Geological Survey scientists and intent on identifying all the ingredients of the watershed's acid-drainage chowder, Simon and other stakeholders took thousands of water samples, studied draining mine portals and natural springs, counted bugs and subjected fish to doses of metal and acid.

They found that the concoction was considerably more complicated than just a couple of spewing mines. Nature, it turns out, is the biggest polluter in the watershed. Some springs, untouched by mining, were as acidic as lemon juice or Coca-Cola, inhabited only by extremophilic microbes. About 90 percent of the aluminum and 80 percent of the copper in the middle fork of Mineral Creek was natural, a finding that jibed with Franklin Rhoda's 1874 observation of a stream "so strongly impregnated with mineral ingredients as to be quite unfit for drinking."

That didn't let mining off the hook, however. Almost 400 of the nearly 5,400 mineshafts, adits, tunnels, waste dumps and prospects in the upper Animas watershed had some impact on water quality. About 60 were particularly nasty, together depositing more than 516,000 pounds of aluminum, cadmium, copper, iron and zinc into the watershed each year.

Notably, neither the Gold King nor the Red & Bonita were on the list yet. At the time, the Gold King was technically dry. No one knew that the mines would soon become two of the state's biggest polluters — ironically, because of the very effort to clean up a neighboring mine.

Children make their way along slushy Blair Street in Silverton, Colorado, in January.
Jeremy Wade Shockley

When I first moved to Silverton, in March 1996, the town seemed like a jilted lover, abandoned by mining but yearning for its return. There were no tourists; people simply didn't visit during the springtime. What was there to do but watch the thawing snow and ice retreat, revealing an interminable winter's worth of dog turds and other junk? Most of the windows on the century-old buildings were boarded up, awaiting train season — the only economic season remaining.

Five years after the mine shut down, the impacts still rippled through the community. The year-round population was half what it had been a decade before, and the school was left with just 60 kids in grades kindergarten through 12. About a quarter of the county's revenue, from production taxes, had vanished. That spring, the Sunnyside Mine's owners cut a pollution deal with the state to release them from their water discharge permit and allow them to stop treating the water still leaking from the American Tunnel, paving the way for their eventual exit.

If I'd had any money, I could have picked up a run-down mining shack for less than $30,000. I was broke, though, so I rented a tiny room in the Benson Hotel, no cooking allowed. Because almost all year-round eating establishments had fallen victim to the mine closure and the seasonal tourist season, I regularly dined at the one remaining culinary option, the Miner's Tavern's microwave burritos notwithstanding: The Drive-In.

Most evenings that spring, after I'd sat down with my burger and fries, a tall man in his 70s came over and sat down across from me. Russ was a fixture at the Drive-In, though his role there was unclear. Between not-so-furtive swigs of Old Crow, he occasionally pushed a dust mop across the tiled floor, or wiped down a counter, or washed a plate. Mostly, though, he waxed nostalgic about the old days, when the streets were "full of men with boots," and any able man could make a decent wage underground.

At the time, Russ struck me as an anachronism, a bourbon-soaked leftover from days long gone. I couldn't comprehend how or why anyone would even entertain the notion that mining might return. It was time to move on. After all, Aspen, Telluride, Park City and even Moab had all abandoned their extractive past, welcomed the feds in to clean up the mess, and cashed in on the New West's amenity-based economy. Give it five more years, I wanted to tell Russ, and you won't even recognize this place. I may not have been entirely wrong, but I didn't yet understand what might be lost in pursuing such a path.

Some time later, after dandelions had replaced the springtime slush in the yards of the old mining shacks, I sat outside Silverton's first, and (at the time) only real coffee shop, the Avalanche, eating key lime pie with Dolores LaChapelle. She had come to Silverton in the 1970s with her then-husband Ed, one of a group of snow scientists who had descended on the caldera to study the potential impacts of cloud seeding on avalanches. Ed left, but Dolores stuck around, building a reputation as an author, scholar and pioneer of Deep Ecology.

I asked her what it was like to be someone like her, writing books about sacred sex, the earth and the rapture of deep-powder skiing in a hard-core mining town. "I just told people I was writing children's books," she replied, a nod to the mean streak often hidden in working-class towns. She was in her early 70s then, her face deeply lined, her trademark silver braid hanging over her shoulder, her brown eyes bright as ever.

Then she spoke about the particular strain of culture that mountains foster, and about how, in Silverton, that culture was, and still is, directly tied to mining. Tearing ore out of the earth mars the landscape and might poison the water irreparably, but, like farming, it also creates an unbreakable, visceral link between people and place. The entire community depended upon this relationship — abusive though it often was — with the earth. "It seems that mining was better than what we have now, in terms of culture," Dolores said. "Now, a lot of people just want to ruin Silverton by making it into a tourist trap."

I think Russ, in his own way, tried to tell me the same thing. He mourned the loss not just of jobs and money, but also of authenticity and, in a way, of identity. Mining is real, genuine, palpable; tourism is entertainment. The people of Silverton had little control over whether the Sunnyside's absentee owner mined here or not. But they did have some say over how mining's mess is handled. And by opposing

Superfund, they believed, they were not fighting against clean water. Rather, they were exerting what little power they had over their own identity and culture and future.

A bicyclist rides through the sleepy streets of Silverton this winter where the old storefronts have been spruced up to serve the tourist economy.
Jeremy Wade Shockley

A few years after I arrived, it looked as if the Animas River Stakeholders Group might actually get a handle on the caldera's dirtier legacy, and all without the feds invading.

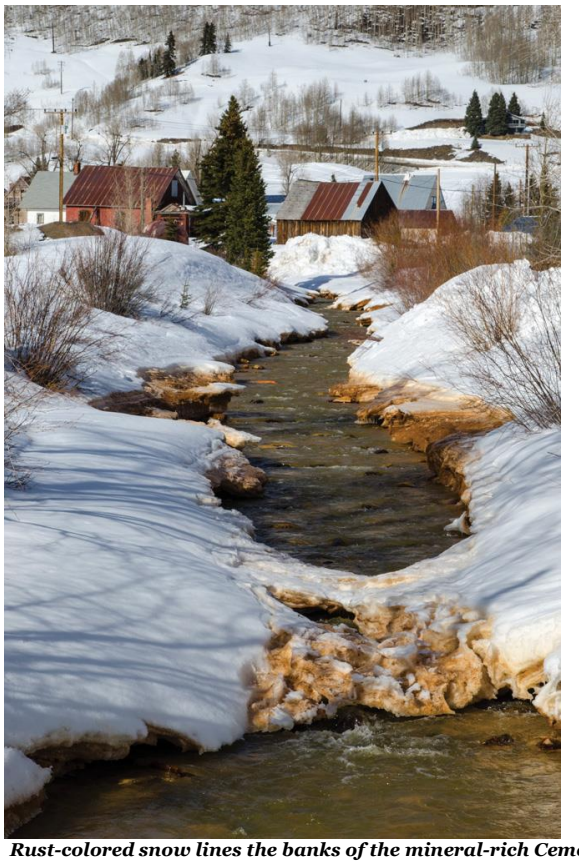
Fearn ramped up his mining plans, inspiring hopes for economic and cultural revitalization. He wanted to re-open the long-abandoned Silver Wing Mine, testing experimental water treatment methods, as well as the Gold King, which had last been mined in the late 1980s. He also planned to overhaul the Pride of the West Mill, which he would use not only to mill the ore, but also to process mine waste, both recovering metals and removing a source of pollution.

Meanwhile, Sunnyside Gold, after spending millions of dollars remediating its own mess and that of past miners, was finally ready to shut down for good. With state and federal funding, the Stakeholders had tackled a number of projects on their own, and, in cooperation with Sunnyside Gold, plugged some draining mines that were off-limits to the Stakeholders because of liability concerns. Those combined efforts were paying off, resulting in lasting improvements to water quality. No one knew then that within Bonita Peak's byzantine plumbing system a yet more perplexing and vile mess was brewing.

In July 1996, some 6,500 feet into the dank, dark American Tunnel, one of the last remaining Sunnyside employees screwed shut the valve on bulkhead #1 — a concrete plug about the size of a boxcar — cutting off a stream of acidic water for good. Behind the plug, the labyrinthine shafts and tunnels of the Sunnyside Mine became a 1,200-foot-deep aqueous grave. Two more bulkheads were installed closer to the surface in 2001 and 2003, to stanch water pouring into the lower section of the tunnel through cracks and faults. Together, the three plugs stopped as much as 1,600 gallons per minute of acidic water, keeping 300 pounds per day of fish-killing zinc from Cement Creek and, ultimately, the Animas River. At least, that was the plan.

But in the early 2000s, tainted water started pouring out of the Gold King, which had gone almost dry when the first section of American Tunnel was built back in the early 1900s. By 2005, the Gold King had

"started to belch out seriously," says Simon. Suddenly, it was one of the worst polluters in the state. To make matters worse, the Sunnyside water treatment plant — transferred to Fearn in 2003 — closed at about the same time, when Fearn's mining venture went broke, killing the best hope for cleaning up the new drainages. Water quality deteriorated. In the Animas Gorge below Silverton, the number of fish per mile dropped by as much as 75 percent, and where mottled sculpins and brown, rainbow and brook trout once flourished, only a few brooks remained.



Rust-colored snow lines the banks of the mineral-rich Cement Creek.
Jeremy Wade Shockley

It was a baffling plot twist in a long saga that was supposed to be nearing a tidy resolution. Clearly, the American Tunnel bulkheads were responsible. But no one knew for sure where the water was coming from — whether it was the Sunnyside Mine pool, or near-surface water returning to its historic path, or perhaps a bit of both. Until the mystery is solved, no one will know who's really responsible and how best to handle the new drainage.

The Stakeholders knew that the most logical solution was another water treatment plant, like the one that operated for years at the Sunnyside. But finding the $10 million or so to construct it, and another $1 million per year to operate it, wasn't easy. "We'd spent all of our money, plus we knew that we had limited abilities," says Simon. "We didn't feel comfortable checking these out on our own, so we invited the EPA to help." That launched a process that revived old efforts to get a Superfund designation, and it also, ultimately, inadvertently led to the Gold King blowout, some 10 years later.

Silverton is no longer the town I stumbled into two decades ago. Both Russ and Dolores are gone. The Silverton Mountain ski area, a stone's throw from the site of all the acid mine drainage action, has kick-started a fledgling winter tourist economy. Many of the town's historic buildings have gotten makeovers, and you can now grab a decent bite to eat, even in the dead of winter. Those mining shacks that were $30,000 in the mid-1990s? They sell for 10 times that now. Like many mining-turned-resort towns, Silverton's chock-full of vacant homes for most of the winter, but long-term rentals are either unavailable or too expensive for the locals — the average wage remains the lowest in the state, even worse than in the chronically depressed counties out on the eastern plains. The absence of a "basic industry" is deeply felt.

For a while, it seemed that this might change. In 2007, Todd Hennis, the current owner of the Gold King, brought an upstart company called Colorado Goldfields to town, buying the Pride of the West Mill and intending to pick up where Fearn had left off. The company put out slick brochures and optimistic videos and press releases, issued shares of stock like it was Monopoly money and pulled in investors, even a handful of locals, on news of rising gold prices. Hennis soon cut ties with the company, however, and ultimately sued, taking the Gold King off the table. And without ever extracting any ore, Colorado Goldfields faded away in 2014, taking with it shareholders' cash along with another shred of hope that mining could return. When Superfund became inevitable, the rest of the hope fluttered out the window — almost.

This February, Fearn, who has been involved in mining ventures here for 40 years, told me that Superfund will surely kill the possibility of mining the Gold King ever again. But infected with the sort of chronic optimism endemic to mining country, he thought other mines, like his Silver Wing, still had a chance.

Bev Rich, chairman of the San Juan County Historical Society, says a combination of historic preservation and scientific research is a more realistic future for the town than mining is.
Benjamin Rasmussen

Yet Bev Rich, who for a time sat on Colorado Goldfields' board of directors, remains doubtful. "Mining probably won't return," she told me. "We are two generations removed from that economy. We're proud of our mining history. We wouldn't be here without it. But global economics makes it almost impossible." Besides, even if the industry did return, its effect on the community would surely be far different than before. It would bring money, yes, but culture, equality and diversity? Maybe not.

Instead, Rich thinks, Silverton should push a more viable industry: historic preservation, perhaps, or acid mine drainage research and remediation. She has long opposed Superfund designation, but now accepts it as inevitable. Like other local leaders, she worries about how the town will handle an influx of outside EPA contractors, given the rental shortage, and the added impacts to public services and infrastructure. Mostly, though, she's concerned that cleaning up pollution might also wipe away the artifacts of mining's history. After all, in many cases they are one and the same.

Last year, on a winter's eve, a friend and I, visiting for Thanksgiving, headed out for a drink at one of Silverton's local bars. Just a few weeks earlier, local elected officials had tentatively thrown their support behind a Superfund designation. A blanket of snow covered the ground, and another storm had settled in, along with the giddiness that comes when you know the snow might close the passes, trapping you for

hours, maybe days, transforming the town into the solitary domain of extremophiles. Just before darkness, the world went cerulean blue in a way that is only possible in the mountains in winter.

"The Miner's Tavern has got to be open," I said. It had been years, but I knew what it would be like: The dim light shining down through a haze of cigarette smoke; Judy, with her raven hair and stiletto heels, running the pool table to her rival's chagrin; Terry, who worked in the mines like his father, bellied up to the bar with his son, who never got the chance; Ernie holding court at the round table up front, with another elected official or three, tipsily deciding the fate of the town.

It was eerily quiet, and as we made our way down the empty main drag, all the shop windows were either boarded up or dark. Maybe everyone went home early, I thought. The last few years were tough, after all: Most of the cottage industries that sprouted before the national recession were gone, the community had been ripped apart by an ugly political battle and its heart was broken by a recent domestic homicide. To top it all off, the Gold King Mine blew out, and now the community was diving into the uncertain waters of Superfund.

We pulled up in front of the Miner's Tavern and started to get out of the car before we noticed something amiss. The neon beer signs were dark. Through the window, we saw pool tables piled with junk, and the door was padlocked from the outside. Turns out Silverton Mountain Ski Area bought the entire Miner's Union Hall, including the tavern and theatre upstairs, and made them into its office and, apparently, storage locker.

We continued on our futile search for an open bar, an open anything, and as snowflakes swarmed the streetlights like a million falling moths, I felt an ineffable sadness, and a nagging notion that Superfund, in this instance, somehow translated to surrender.

Senior Editor Jonathan Thompson writes from Durango, Colorado.
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